

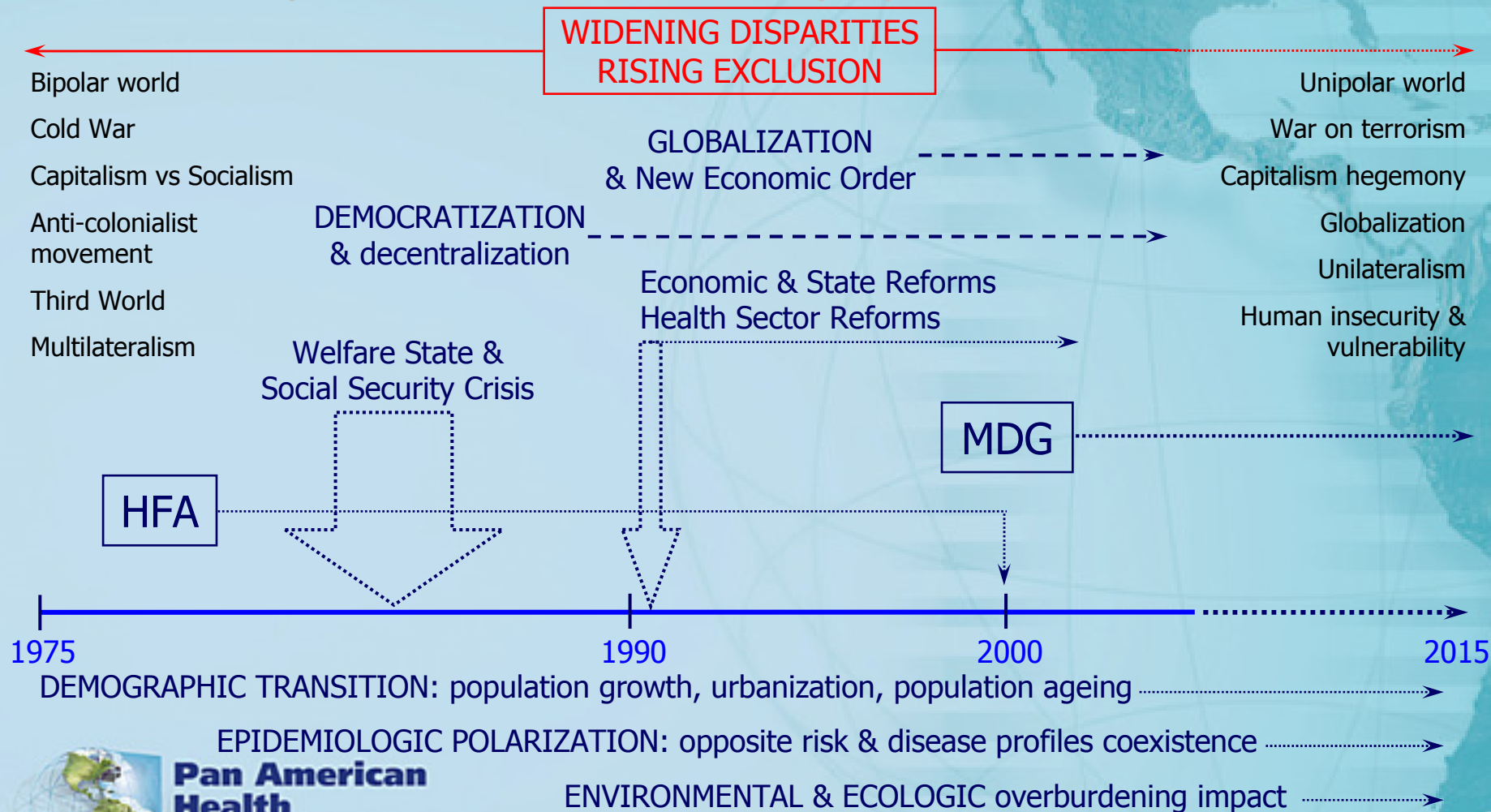


# PAHO Strategy for Strengthening Epidemiological Capacity in Health Systems & Services

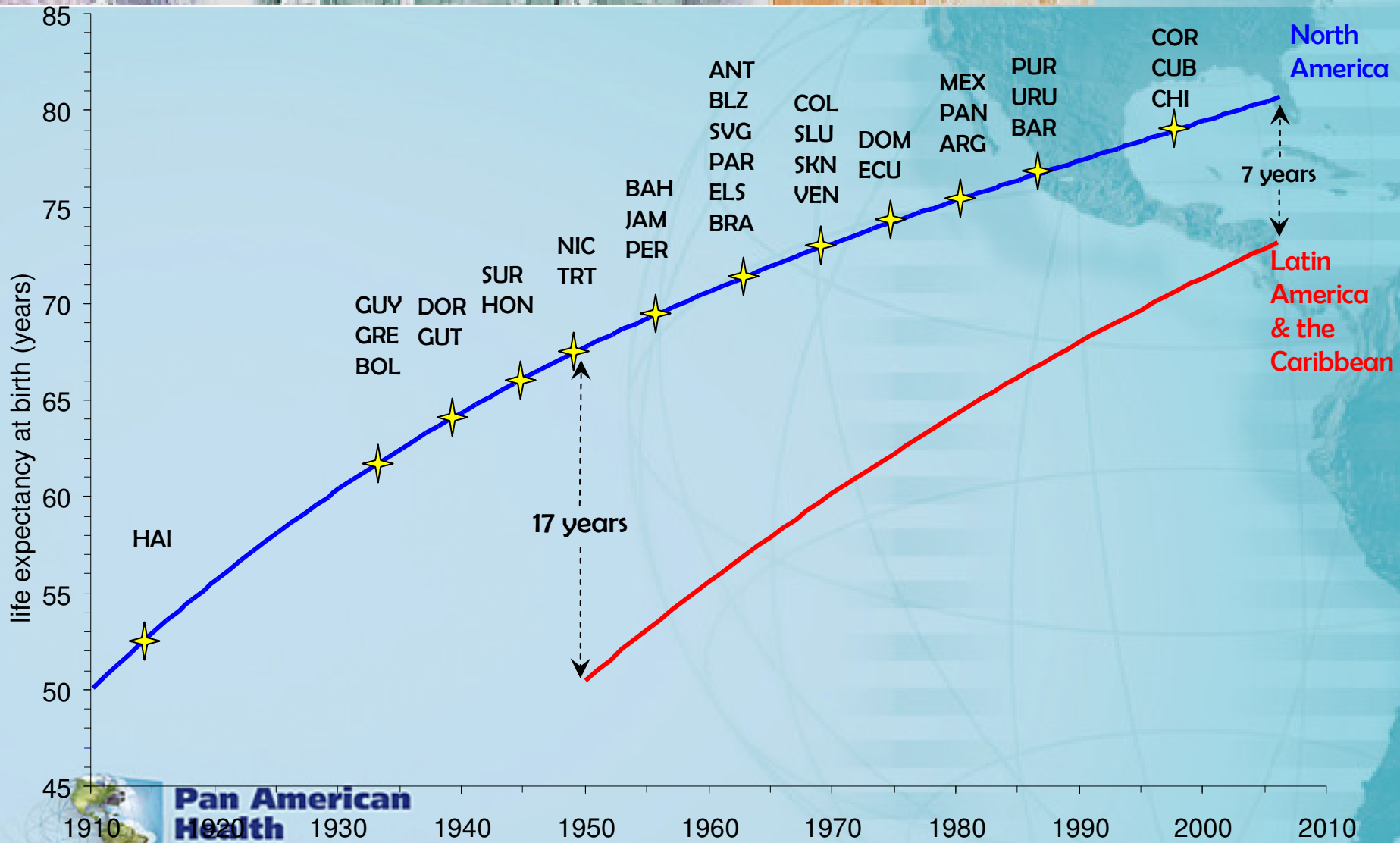
Dr. Jarbas Barbosa, Manager  
Health Surveillance, Disease Prevention and Control



# the political scenario of population health



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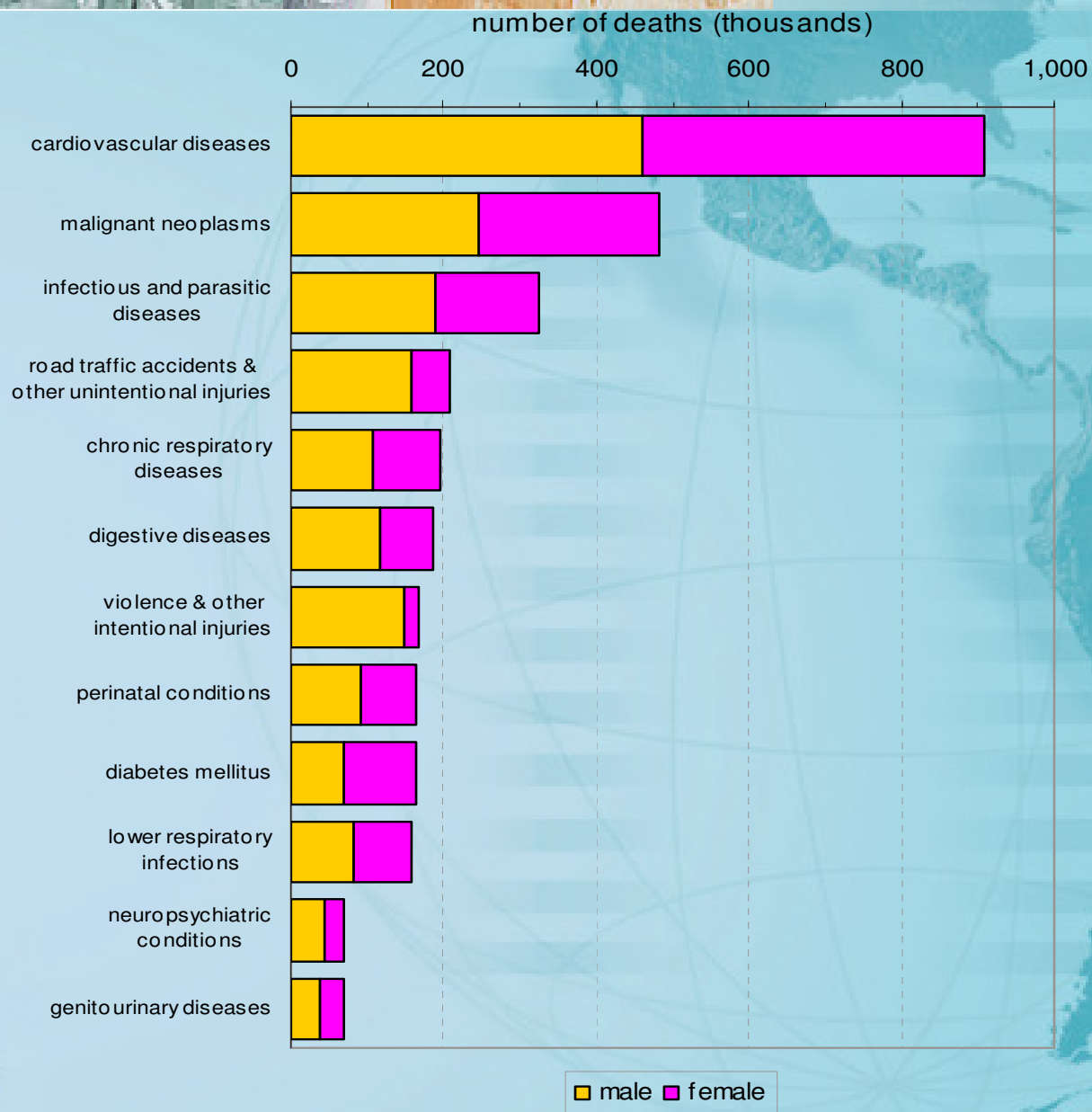
1910

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**trends in life expectancy**

# The epidemiological picture in the Americas 2005: disease profile



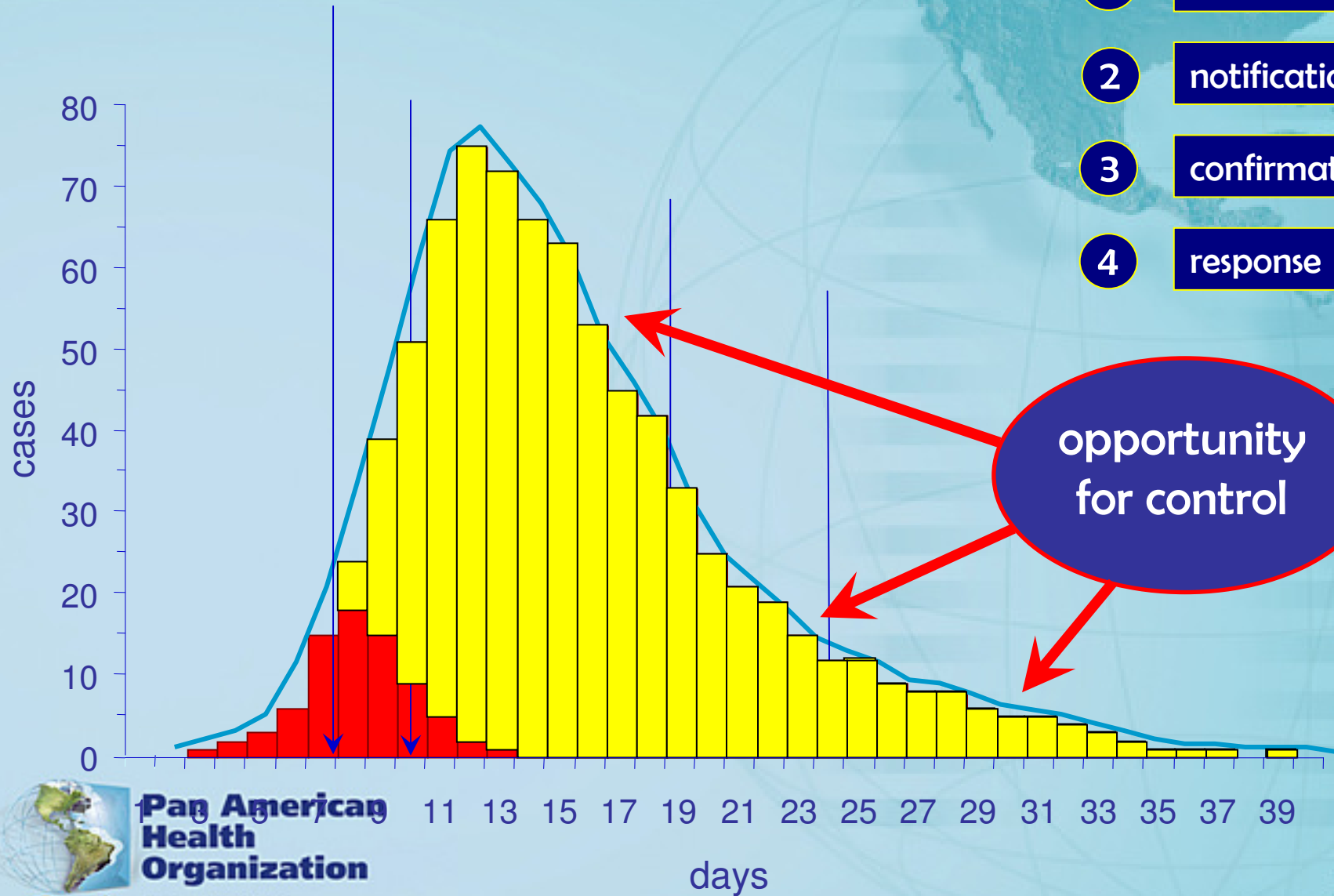
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- 1 detection
- 2 notification
- 3 confirmation
- 4 response





## regional context and new challenges for epidemiology

- the *Buenos Aires Seminar* on Uses of Epidemiology (1983) ▶
- epidemiology and the Essential Public Health Functions (EPHF) ▶
- epidemiology role in Health Sector Reform processes ▶
- The Health Agenda for the Americas 2008-2017 ▶
- PAHO Strategic Plan 2008-2013 ▶



## Seminar on Uses & Perspectives of Epidemiology (Buenos Aires, 1983)

- health situation studies & analyses
- epidemiologic surveillance of diseases and other health problems
- causal, etiological epidemiologic research
- impact assessment of health policies & programs



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## Essential Public Health Functions

- health situation monitoring
- public health surveillance & risk control
- human resources development
- emergencies & disasters response
- policy development & managerial capacity
- health regulation & enforcement
- health promotion
- innovative public health solutions
- quality of services
- equitable access
- intersectoral action for health
- social participation & empowerment



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## Health Sector Reform processes

- political and administrative decentralization
- re-definition of sectoral functions, both in individual health care and disease control programs, at national, subnational, and local levels
- structural changes in provision, regulation, and financing of health services and programs
- multiplicity of health providers (segmentation & fragmentation)
- expansion of coverage and/or affiliation
- Primary Health Care renewal & strengthening



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## Health Agenda for the Americas 2008-2017

### Areas of Action

- reinforcing the National Health Authority
- encompassing health determinants
- increasing social protection & quality access to healthcare
- decreasing health disparities among & within countries
- reducing health risks & burden of disease
- strengthening public health workforce management & development
- benefiting from knowledge, science, & technology
- protecting sanitary security



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## **PAHO Strategic Plan 2008-2013**

### **reducing health risks & burden of disease**

- SO1: reduce communicable diseases health, social & economic burden
- SO2: combat HIV/AIDS, tuberculosis & malaria infections
- SO3: prevent & reduce morbidity, disability, & premature mortality due to chronic, non-communicable diseases, injuries & violence
- SO4: reduce morbidity & mortality in key life-course stages; improve sexual & reproductive health, & promote healthy aging
- SO5: mitigate social & health consequences of disasters & emergencies
- SO6: promote health & development and reduce health risk factors



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## practice of epidemiology in health services systems epidemiological surveillance

- outbreak early detection & rapid response
- new, emergent, & re-emergent diseases
- International Health Regulations (2005) core capacities
- chronic, non-communicable diseases and risk factors
- environmental health & risk factors
- surveillance & programs
- surveillance & services



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## practice of epidemiology in health services systems health situation analyses

- population health situation assessment
- health priority setting, and health policy & programs setting
- monitoring of social disparities in health
- population health impact assessment
- epidemiology role in health regulation
- integration of new epidemiologic knowledge from causal and applied research into the public health practice



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## four inputs to a regional strategy

- regional Delphi-like consultation on epidemiological core competencies (November 2007-February 2008)
- regional workshop on permanent education in applied epidemiology (Mexico; February 2008)
- Expert Group meeting on practice of epidemiology in health services (Washington DC; July 2008)
- bibliographic search on epidemiological research trends in Latin America and the Caribbean (BIREME; July 2008)



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## competencies in applied epidemiology current status of consultation

- 13 Latin American and Caribbean countries
- 12 practice categories
- core, interphase and related-fields competencies
- development of country and public health system considered
- infrastructure and cooperation potential also assessed



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## in-service training in applied epidemiology main policy guidelines

- adopt a **pyramidal approach** to health workforce training
- examine relevant modular training series available (**MOPECE**)
- expand **virtual distance learning** in epidemiology
- use **competencies** profile as a bridge for education and service development
- promote **academia/MoH alliances** at national level
- promote and support **specialized training** FETP-like



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## Pyramidal approach

FETP

Health Analysis

**Competencies**

Epidemiological  
subjects - non  
epidemiologists

Epidemiological  
subjects - local  
epidemiologists



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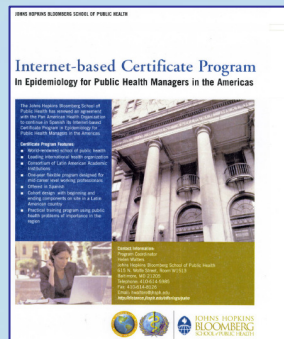
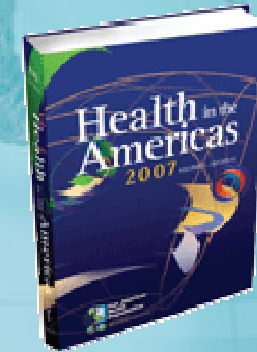


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# Technical cooperation - training

## Health Analysis - USF



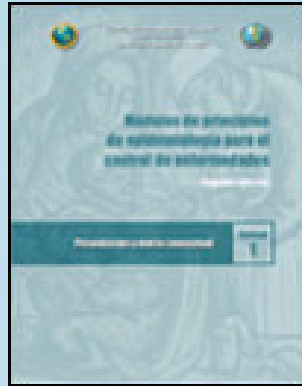
## Epidemiology for Public Health Managers - UJH

## Measuring Health Disparities - UM





## Technical cooperation - training



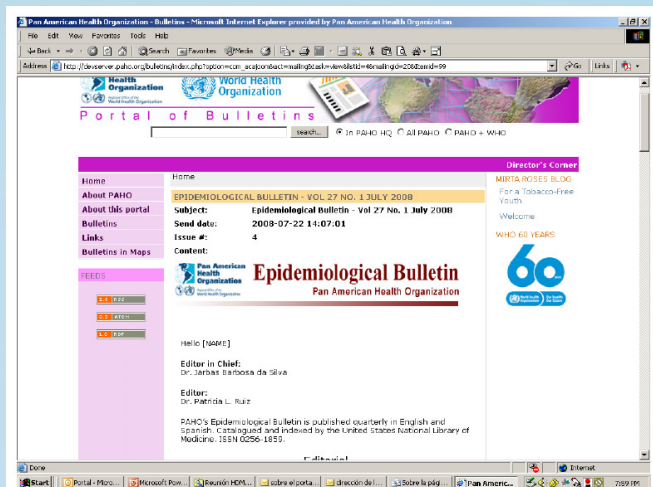
**MOPECE**



**Competencies and FETP - CDC**



# Technical cooperation – information and knowledge

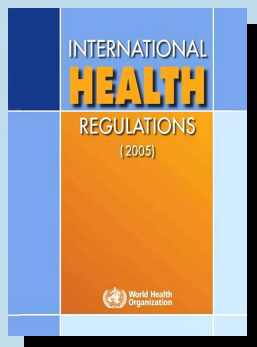


Epidemiological Bulletin – Epi  
webpage

Virtual campus OPS



# Technical cooperation – epidemic alert and response (IHR 2005)



**Core capacities assessment**



**Rapid response teams**

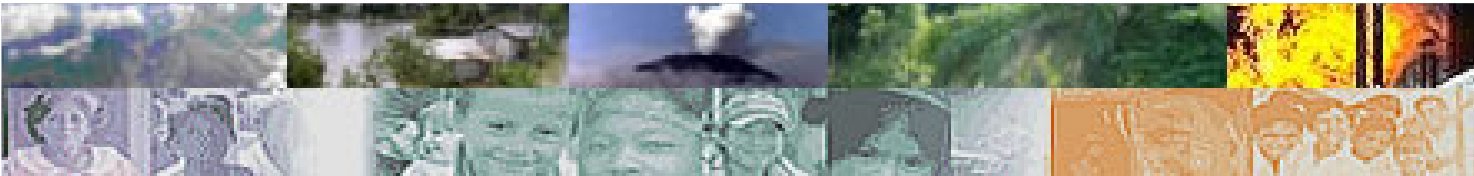


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## Technical cooperation – new challenges NCD



### Regional Plan on Non Communicable Diseases



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## practice of applied epidemiology in health services main policy guidelines

- surveillance as *the* core epidemiological practice in health services & programs
- integration of surveillance in programs & services
- redefinition of surveillance's aims, contents & scope
- surveillance in the context of Primary Health Care
- use core epidemiologic competencies profile as a bridge for education and service development



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## toward a regional strategy for strengthening the practice of epidemiology in health services systems

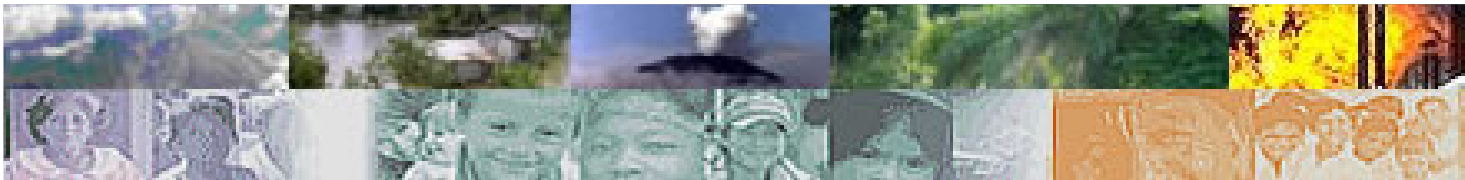
- define current needs & demands for epidemiology in health services
- set epidemiological core competencies by operational levels & functions
- put in motion training initiatives to match needs with competencies
- promote the definition of an applied epidemiological research agenda and support incorporation of new knowledge into public health practice



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**Thank you!**

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